

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A dental instrument having a transmission device with at least one magnetic and/or magnetizable clutch element, said at least one ~~said~~ clutch element having an air gap, the instrument comprising:

a means for influencing the transmission torque of the magnetic and/or magnetizable clutch element by modifying the magnetic flux of the clutch element, said means for influencing being movable to modify the magnetic flux and thereby limit the transmission torque to a ~~predetermined~~ selectable threshold value, said means for influencing thereby enabling generally continuous operation of a drive tool operated by said dental instrument to transmission torques generally below the ~~predetermined~~ selectable threshold value.

2. (Withdrawn) The dental instrument according to claim 1, further comprising:

a means for modifying the air gap of the clutch element.

3. (Previously Presented) The dental instrument according to claim 1, wherein:

said means for influencing being made of a magnetically conductive material in the form of a sleeve.

4. (Previously Presented) The dental instrument according to claim 3, wherein:

said sleeve is positioned in a zone of influence of the at least one magnetic and/or magnetizable clutch elements.

5. (Withdrawn) The dental instrument according to claim 3, wherein:

the means for modifying the flux guide coil is an electromagnet.

6. (Withdrawn) The dental instrument according to claim 5, wherein:

the magnetic force of the electromagnet is controlled according to service parameters.

7. (Withdrawn) The dental instrument according to claim 5, wherein:
the flux guide coil is indirectly modified by stationary magnets.
8. (Withdrawn) The dental instrument according to claim 5, wherein:
the flux guide coil is directly modified by moving magnets, and
the moving magnets transfer the torque with respect to the magnetic force.
9. (Withdrawn) The dental instrument according to claim 4, further comprising:
a softly magnetized part,
the low retentive part is only effective in a subzone of the magnetic clutch element.
10. (Previously Presented) The dental instrument according to claim 4, wherein:
switching means are provided that cooperate with the magnetic clutch element and the
means for influencing.
11. (Currently Amended) The dental instrument according to claim 1, wherein:
the magnetic clutch element enabling the drive tool to be moved in an opposite direction
to an original working direction by means of a force created in the opposite direction after
declutching of the magnetic clutch element.
12. (Previously Presented) The dental instrument according to claim 1, wherein said
transmission device being in the form of a neck drive, said dental instrument further comprising:
a drive motor with high rotation speed; and
a reduction gear for reducing rotation speeds in a zone between 5 and 25 rotations/sec.
(300 to 2100 rotations/minute).
13. (Previously Presented) The dental instrument according to claim 1, wherein:

the drive tool can be loaded with torsion up to the threshold value; and
the transmission device is formed with the magnetic clutch element so that the threshold value of the drive tool is never reached.

14. (Currently Amended) The dental instrument according to claim 1, wherein the drive tool is for root canal treatment.

15. (Withdrawn) The dental instrument according to claim 1, wherein:
the magnetic clutch element is arranged so that rotations are transmitted on an input side and on an output side.

16. (Withdrawn) The dental instrument according to claim 1, wherein:
the magnetic clutch element is arranged such that a part of the clutch performs a rotation, and the other part of the clutch performs a translation.

17. (Withdrawn) The dental instrument according to claim 1, wherein:
both magnetic clutch elements perform translations.

18. (Currently Amended) The dental instrument according claim 1, wherein:
a connection point connected to one side of said clutch element is provided on a motor, said connection point corresponds to the connection point of a tool working with a high rotation speed.

19. (Previously Presented) The dental instrument according to claim 1, wherein:
said means for influencing being a magnetically soft part.

20. (Currently Amended) A dental instrument having a transmission device with at least one magnetic and/or magnetizable clutch element, said at least one ~~said~~ clutch element having an air gap, the instrument comprising:

a means for influencing the transmission torque of the magnetic and/or magnetizable clutch element by modifying the magnetic flux of the clutch element, said means for influencing being movable to modify the magnetic flux and thereby limit the transmission torque to a ~~predetermined~~ selectable threshold value, said means for influencing thereby enabling operation of a drive tool operated by said dental instrument to transmission torques generally below the ~~predetermined~~ selectable threshold value.